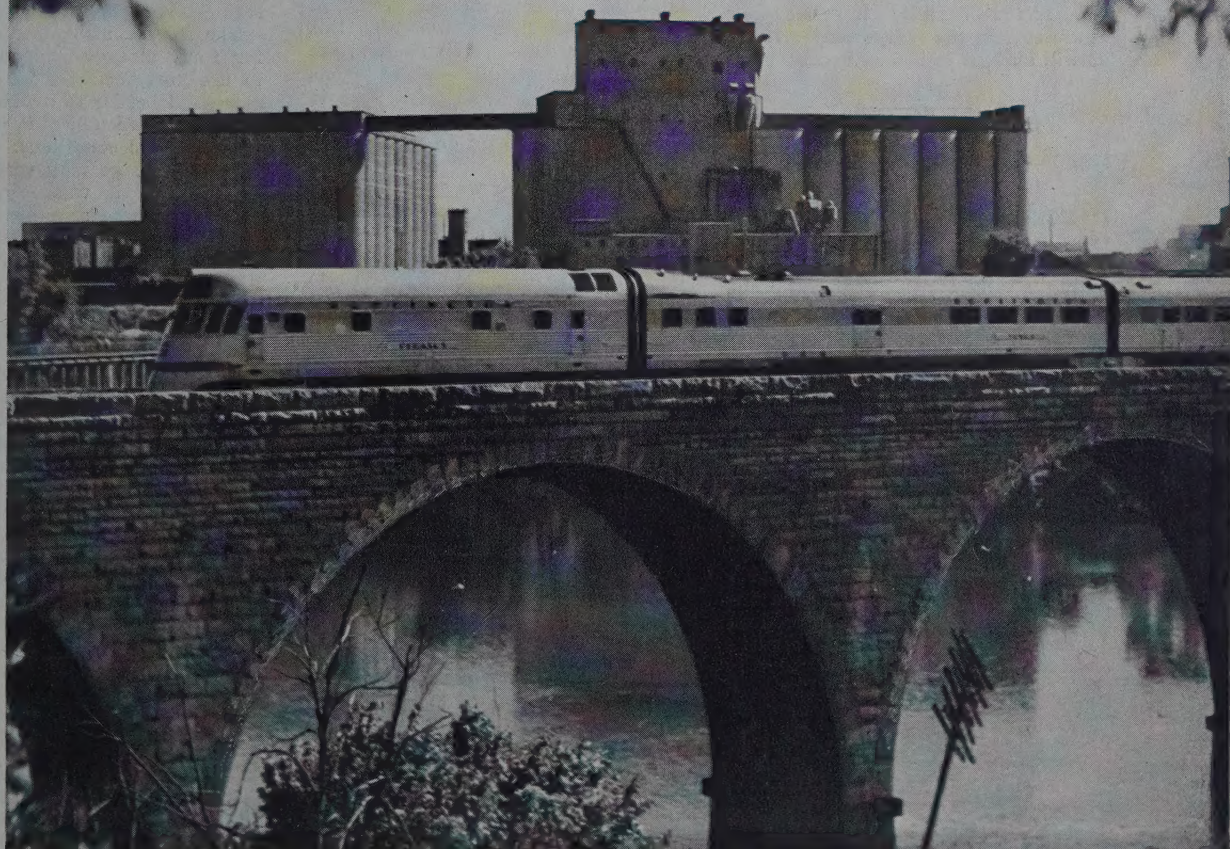


# Grain

MARCH  
1  
9  
4  
1

WASHBURN-CROSBY'S ELEVATOR AT YOUR CONVENTION CITY

*On to Minneapolis  
June 9-11*





# SUCCOTASH

## WORLD WHEAT CROP

**T**HE world's wheat crop for 1941-42 will not differ greatly from that of 1940-41. Canadian developments seem to indicate that production will drop in that country, but an increase is expected in Europe. The United States and Argentine crops will remain the same. Some reduction is possible, however, in Argentina. The Australian crop will most likely be much smaller than usual.

In the United States, a Winter wheat crop of approximately 633 million bushels as of December 1, 1940, a Spring wheat crop of about 180 million bushels (estimated) and an estimated carryover on July 1, 1941, of 380 million bushels give a total approximation of 1,200 million bushels wheat supply for 1941-42. 1940-41 crop was 1,099 million bushels.

Domestic consumption for the coming year will be 675 million bushels and a rise from the expected 35 million bushel estimated export is hoped for. If the 35 million bushel export figure stands, the carryover for 1941-42 will amount to 525 million bushels.

## UNIFORM GRAIN STORAGE SAME FOR 1941

**S**ECRETARY Wickard of the U. S. D. A. announced that the Uniform Storage Agreement would remain the same for this year and probably extend through the marketing season for wheat, beginning in 1942. Rates will remain the same too.

## GOVERNMENT TO SELL DEFAULT CORN

**T**HE Government has acquired about 220,000,000 bushels of corn through default of loans to farmers. Approximately 59,000,000 bushels of this is in terminals and available for sale at 65¢@59¢ a bushel, and another 16,000,000 is in subterminal markets. Government owned corn in steel tanks and country elevators is now on sale at 65¢ per bushel.

## 1940 CROP GRADE LOWERED

**G**RAIN grading No. 3 and higher decreased in amount to 32% compared with 58% in the last part of December. Number 4 increased to 48%; number 5 to 16%; and sample grade to 4%.

## BRAZIL AIDS WHEAT PRODUCERS

**D**ISTRIBUTION of free seed, loaning of threshing and other machinery, fixed minimum prices for a period of twelve years, advice on cultivation, soil requirements, and other problems, and the erection of flour mills in various parts of the country have all been undertaken by the Brazilian Government in an attempt to reduce the country's dependence on imported wheat.

## FEED THE WORLD!

Says "Life's" Editor-in-Chief  
**HENRY R. LUCE**

**"B**UT now there is a third thing which our vision must immediately be concerned with. We must undertake now to be the Good Samaritan of the entire world. It is the manifest duty of this country to undertake to feed all the people of the world who, as a result of this worldwide collapse of civilization, are hungry and destitute—all of them, that is, whom we can from time to time reach consistently with a very tough attitude toward all hostile governments.

"For every dollar we spend on armaments, we should spend at least a dime in a gigantic effort to feed the World—and all the World should know that we have dedicated ourselves to this task. Every farmer in America should be encouraged to produce all the crops he can, and all that we cannot eat—and perhaps some of us could eat less—should forthwith be dispatched to the four quarters of the globe as a free gift, administered by a humanitarian army of Americans to every man, woman and child on this earth who is really hungry."

## LARGE ARGENTINE CORN CROP EXPECTED

**A** CROP as large as 400 to 470 million bushels is expected for 1940-41 in the Argentine. An exportable surplus of around 250 million bushels of old-crop corn was still on hand at the beginning of this month, but due to lack of storage much of this was held on farms and has been damaged so only a small amount of this will be merchantable. Exports have dropped from the ten year average of 252 million bushels to 60 million bushels.

## EARLY NAVIGATION SEASON CONTEMPLATED

**P**LANs to get lake navigation moving straight through by the first week in April are being discussed by Great Lakes marine men. The demands of defense industry provide sufficient impetus for this scheme. The use of coast guard cutters to break up ice and airplanes to spot ice fields will probably be necessary, but right now the lakes are quite clear.

## PLENTY OF BOX CARS FOR GRAIN

**A**LTHOUGH the supply of box cars for the grain movement at harvest time is reported to be "ample" by the Bureau of Agricultural Economics, emphasis is again placed on the government's desire for more storage space in order to preclude any possibility of congestion. Should no storage be available at destinations, the railway transport system may be seriously tied up, the Bureau said.

The Bureau also repeated the need for farm storage and the necessity to use port facilities for long-period storage, in order to avoid the risk of the financial trouble of excess capacity under normal conditions. Also, since a steel shortage may curtail box car construction, it was suggested that the railroads enforce heavier loading cars and shorten the routings to increase the capacity of present facilities.

## PRICES DUE FOR RISE

**T**HE increase in consumer income due to the industrial activity in the interest of national defense, will continue to raise the demand for consumer goods, but this demand will be gradual. The strong possibility of increased exports to Britain of grain and foodstuffs would help much in further bolstering prices.

Wheat has risen eight cents a bushel in the last eight months, while larger quantities of feed grains are on hand and less of these stores are under seal than last year.

## GRAIN IN TURKEY

**I**N recent years Turkey has improved her position in regard to agriculture a good deal, exporting to Greece, Yugoslavia, Italy and Belgium in 1939-40. The government regulates trade and prices and right now, because of the war, exports have ceased entirely.



# Editorial

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## THE GAME OF "WHAT IS IT"

ONCE upon a time, in the land of Greece, there lived a cagey old fellow named Socrates. He was a teacher, after a fashion—very much respected by everyone—except, of course, his wife. Today, because of the quality and the wisdom of his philosophy, he is considered one of the greatest men who ever lived.

However, his immediate interest to us consists in a peculiar habit he had of asking a great many questions of those who were supposedly his intellectual inferiors. His pupils constantly complained that he told them nothing, but always made them explain things to him who was supposed to be their teacher.

Socrates would ask them, for instance, to define the word "justice" and by the time they had mentally meandered through the inferential ramifications of the word, it was easy for them to see that they hadn't up to then quite exactly known what justice meant. (If you don't believe this try it on yourself.) The pupils soon discovered that this vague knowledge of the meanings of words extended to practically their entire abstract vocabulary.

Preserved in the ivory tower of scholasticism throughout the ages, the art of the "Socratic definition" has in modern times been dynamically revived in the social science of semantics, which is considerably different from, though akin to philology.

Semantics (by pinning down abstracts to definiteness) is supposed to serve as a defense against "the tyranny of words" and the subtleties of propaganda.

To take an extreme example, let us sympathize with the word "Communism." To some people Communism symbolizes purges and massacres, to others it means world revolution, and to still others it is the refuge of the morbidly poor and ignorant of the world. Then again some theological students and even theologians say that Communism is more compatible with Christianity than Capitalism. So—one can go down into the slums and hear the evangelists of the gutters shouting to the world the fact that Christianity and Communism are one and the same thing!

These partial and hasty interpretations of words must be guarded against, for if they're used often enough it is only natural that we come to forget that they are partial. Of course, one can't find the unbiased facts about everything there is, but judgments can be reserved or at least tempered to a liberal degree. By the use of reason only, can such words as "religion," "love," "patriotism," "wisdom" and "philosophy" be isolated into the precise verbal tools they should be.

Use this reason as much as possible instead of relying on the emotional reflexes which have been conditioned in you during your unguarded moments. Rational thought is the only method which can build up effective resistance against the verbal bombardier—the propagandist—the man who would make you think as he would like you to think.

Like Socrates you will both learn more and teach more by asking questions which exercise the rational faculty of both you and your fellow-conversationist, instead of riding the ego-tickling hobby-horse of word-slinging.

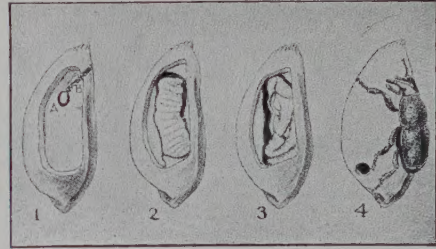
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# Some Answers to INSECT and GRAIN FUMIGATION QUESTIONS

*Often Asked*



Adult granary weevil feeding on kernel



Adult sawtooth grain beetle



Adult Cadelle

**QUESTION:** *What stages of weevil are apt to survive winter chilling of grain?*

**ANSWER:** The larval (worm) and pupal (cocoon) stages which complete their life cycle within the kernel of grain. Thus protected against the effects of mechanical handling, their natural processes are slowed down or suspended under adverse conditions of cold—only to be resumed when the grain warms up.

**QUESTION:** *What is a "bran bug"?*

**ANSWER:** In the parlance of many elevator men, a general name for nearly any grain-infesting beetle other than a weevil; among others, some particular beetle, such as the flat grain beetle—according to entomologists, the saw-tooth grain beetle because of its common occurrence in bran.

**QUESTION:** *Is a "refumigation" effect secured by transferring grain a few days after treatment?*

**ANSWER:** It is unlikely that any effective gas concentration survives the thorough aeration produced by turning. The more favorable results often noted after transferring are probably due to delayed death of insects previously affected by the original concentration and to mechanical handling of such weakened insects in transferring.



Anyone wishing more detailed information on these or other subjects related to grain fumigation is invited to write us. Questioners will not be subjected to sales arguments, but will receive honest answers within the limits of our information.

## WEEVIL-CIDE

THE DEPENDABLE GRAIN FUMIGANT

Manufactured by

### The Weevil-Cide Company

1110 Hickory

Kansas City, Mo.





# HOUSEKEEPING



## *in Elevators and Feed Mills*

By **JOSEPH G. HUBBELL**, President

National Inspection Service, Chicago

**I** THINK I can make a contribution more by considering this question from my standpoint so that you who are responsible for these very valuable properties can get some idea of how the question bears on the very important matter of maintaining satisfactory insurance coverage.

It is a wide spread from the slow and simple operations of a country elevator to the activities of a large railroad shipping terminal handling perhaps fifty million bushels of grain a year. As activity determines fire hazard, you may realize that a large shipping terminal is about akin to a sawmill.

### **Skeptical of Electricity**

**I** HAVE known grain elevators as an inspector for about 35 years and in that time there has been a vast change. Before my time there were methods in vogue in handling grain that I have never seen but have heard about. I am told that they used to trim grain cargoes in boat hulls by candle light or oil lamps and never had an explosion. I recall how doubtful we were of the safety of electric lights and wiring when they first appeared, as well we might be, because from today's viewpoint the wiring was not very safe and the lamps were distinctly a source of hazard as the globes were unprotected against dust and had switches on the lamp sockets.

Grain elevators and feed mills have always been hazardous risks and are still so regarded by fire insurance companies. Many insurance companies decline flatly to write insurance upon risks of this class for the reason that, no matter how carefully they select their risks, loss ratios run 90 to 125%, which, when expenses are added, means that they are paying out over a dollar and a half for every dollar they take in.

### **Specialized on Terminals**

**I** HAVE been associated for years with a general inspection concern which very shortly after my coming with it began to study the terminal grain elevator situation. We found that dirt, dust, neglected bearings, broken spouting, leaky legs and clutter were a generally accepted standard of operation in 25% of the houses we inspected and a rather mussy standard

of cleanliness was considered sufficient in most of the others. Possibly 25% of all houses inspected showed real concern about condition of apparatus, orderliness, dirt and accumulation of dust. We found that fires rarely occurred in the clean houses and they very nearly always occurred in the dusty and mussy ones.

We know there is usually a certain degree of tension between the downtown office and the plant over the question of operating costs. Grain elevator Superintendents are not always selected because of their concern to have the machinery in good order or keep a clean house. We know Superintendents whose chief recommendation is their skill in mixing grades. One concern will find out that another concern handles its grain at such-and-such a cost per bushel, which results in pressure upon the Superintendent to reduce his

---

**M**R. HUBBELL knows quite a bit about grain elevators, and he knows quite a bit, too, about why grain elevators blow up. Most significant to him is the fact that among the bare 25% of elevators that keep clean, fires are a rarity. The following narrative puts forth and explains in a most engrossing manner the need for good housekeeping and a good many benefits of good housekeeping which are not generally recognized.

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cost. He cuts his crew and his house shows it inside of a few days and certainly inside of a week or two.

During the war the stock fire insurance companies organized the Underwriters' Grain Association. With the protection of the inspection service of this association and other extraordinary precautions, the companies increased their writings so as to take care of all liabilities and succeeded in greatly reducing major losses through the war period. Moreover, through the Association, grain men were able for the first time in history to get policies in 5, 10, 25, or 50 thousand dollar amounts for the asking, instead of the old nerve racking hunt for insurance cover. The results secured are proof that losses in grain elevators can be reduced by observance of proper methods of adminis-

tration and certain details of construction.

### **Dirty Trick**

**I** RECALL many arguments with Superintendents because dust had lain long enough to show weevil or bird tracks, or chaff showed sprouts of grain. I remember a large elevator at Kansas City in which the dust trunk from a cleaning machine had opened at the elbow and was tied with burlap which had jarred out of place so that there was a great blast of dust and chaff coming out. It struck the floor and had piled up perhaps a wagon box load of dirt. When I criticised the conditions the Superintendent literally kicked me out of the house. Of course, I cancelled my \$5000.

We in the Grain Association (I should explain that our office supervises the inspection work of the Association) know well that there is more to the question than dirt, but we are sure of one thing—which is that the man who has dirty machinery, dirty floors and ledges, who lets chaff lie and stores broken stuff in corners, or who tolerates leaky legs and spouting and scraping buckets, is going to have chokes, hot bearings, fires and explosions just as certainly as the Lord made little apples.

A great deal has been said about dust. Elevator or feed mill dust is extremely hazardous material. The only mystery is that the hazard can endure so long in some places without causing disaster. Even insurance men were beginning to feel that the incombustible or so-called fireproof elevator, was immune. I inspected a house years ago on the east shore of Lake Huron, very large, with a spiderwebbing of steel work over open bins under the belts. The dust was on that steel from two to six inches deep and the under part had been there so long that it was black and caked from age. I actually had difficulty in getting it to flake apart into a dust cloud.

### **Wooden Houses Immune?**

**A**FTER some twenty years of no accidents, beginning about the time of the war, a number of disastrous explosions occurred in fireproof houses and in feed mills and other grain processing plants. The procession, once started, has seemed never



to stop. As there are still a good many wooden houses it looks as if they were not very subject to explosions. My feeling is that there must be something about fireproof construction that predisposes such risks to explosions. My own belief is, that it is the hard surfaces.

It must be recognized that when a bin is receiving grain the air in that bin is a cloud of gun powder. So also is the air in the spouting carrying grain and the air in legs and garners while elevating grain gun powder. If you have ignition you will have blast involving all the connected portions of that dust cloud. And if you have deposited dust in rooms or spaces containing the exploding equipment, even in a slight amount, the jar of the explosion and the sudden jam of air in the house will generate a general dust cloud which will be ignited from the original blast. The result will be that the premises are destroyed totally or very seriously damaged.

Repeated warnings do not seem to arouse the operators to this danger. I shall not use names, but I know of several instances where terrific explosions have occurred from conditions which inspectors recognized were sure to produce explosion, if accident happened, and the proprietors had been advised repeatedly.

#### Minus Pressures Help

**B**ECAUSE of the difficulties of controlling this very hazardous dust, years ago, the Underwriters' Grain Association contributed toward a series of experiments by the Underwriters' Laboratories of Chicago. It was found that a system of air out-

take, properly applied to boots, legs, heads, garners, scales and hoods over belt discharges, very easily prevented the escape of dust into the house without removing any considerable weight of material from the grain. It is puzzling to know why, when so simple an apparatus prevents the escape of dust and saves endless sweeping, it is not generally applied. This experiment was made in a Minneapolis terminal elevator under regular working conditions. The principle we sought to prove was that if we could keep a little minus pressure on the spouting, legs, garners and scales, we could stop the little cigarette puffs of dust which are ordinarily blown out from such apparatus when being used. We proved our point absolutely and houses which use this simple precaution have almost no dust to deal with if they have closed bins.

If a house Superintendent wants to condition grain by letting it fall from the overhead spouts in the working floor, we can't help it. He is going to have a terribly dirty house all through the working floor and basement. He maintains he has to do it. We believe there should be some other way. Of course, the right way is to put it down through cold blast in a dryer or some similar device, but many houses haven't dryers. We believe that the danger is too great to justify ever doing such an operation inside the house.

#### Hazard with Best Care

**T**O KEEP a house orderly it is necessary to have it clear of all miscellaneous storage of any sort, such as lumber, broken or spare parts, unused spouting, bags and bagged

material, or any other obstructions to easy cleaning. This is because such material harbors dust which cannot be reached but will contribute to a disaster. There should be none such in a grain elevator. It should be in out-buildings well away, and one of our requirements is that any broken material and spare parts be let down and stored outside and that bagged stock be moved out to other buildings. Dust and chaff must not be permitted to accumulate under machines nor on ledges, such as the tops of bins, beams and bridging between joists, the channels of "I" beams, sills of any kind, or on spouting and such.

With the best of care there still remains the probability that explosion will occur in legs, spouts, garners and bins where grain is being handled and in trunks, spouting and conveyors, and collectors handling material from scourers and mills, if anything happens to cause ignition of the dust cloud in the apparatus. But in a clean and properly designed house a general destructive blast will be avoided.

As it is very difficult to get dust out of crevices and off small or obstructed surfaces, the wise course is to build so as not to have such places for dust deposit, provide air out-take on dust generating devices and provide light and easy yielding walls to relieve explosion pressures, so as to cut down the danger of general disaster.

#### Reprinted by Request

##### "X" MARKS THE WEAK SPOT

**O**RDINARY double strength glass, when scored on the weather side of the glass with a letter "X," beginning at a point two inches from each corner, weakens the glass to such an extent that should an explosion occur, it only requires 100 to 140 pounds per square foot to break the glass, whereas the same glass un-scored requires a pressure ranging from 500 to 800 pounds per square foot.

#### FIRE CONQUERED BY EFFICIENT EMPLOYEES

**F**IRE from an overheated basement motor ignited a grain plant last week. The heat rose through a metal vent pipe endangering all floors of the plant. The employees cut the power and patrolled every floor in the plant until the fire was put out.

#### SAFETY SCHOOL

**O**NCE a month night watchmen at certain Chicago plants go to safety school for instruction in fire hazards and other safety items such as handling fire extinguishers, sprinklers, what safety hazards to look for, etc. The watchmen look forward to the school with great pleasure and have been developed from ordinarily floor-pounding, clock ringers into good, constructive employees.



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# Elevator Barley—

## AND THE BARLEY MALTSTER

**I**N THIS article the author makes no claim to either expertness or omniscience in the matter of passing judgment on the relations of the Terminal Elevator Operator and the Maltster.

Certain claims and charges have, however, been made, and it is thought that perhaps by bringing about an open discussion of the various matters some better understanding between the two groups might be brought about.

Let us first look at the problem from the standpoint of the maltster, inasmuch as he is the customer and the one to be satisfied. Granted that the malting operation is a complex process and therefore requires the services of an expert maltster. Granted also that the maltster over a period of years in the pursuance of his art has found that only a certain few barley types or varieties are suitable to the malting process. (There are five varieties which are accepted by the malting fraternity as being the most desirable for their purpose.) Accepting these facts let us look into the further requirements of the maltster in regard to the qualities of the barley he buys for processing.

### Best of Barleys Go Wrong

**O**BJECTIVELY now, since malting barleys bring a premium over and above barleys for the pearling industry and barleys for feeding purposes, the cream of the barley crop is offered to the maltster. The malting barley buyer is an expert in his own line, and rightly so, since it is up to him to purchase the barleys which experience has taught him will produce the best malt of each kind for his customers.

What other qualities now should these barleys have since we have already accepted the varieties desired by the maltster as the original limitations? The maltster wants barley that is plump, uniform in size, and bright in color. He also wants a barley that is mellow rather than a hard type. So much for the physical characteristics of the barley itself. Now, what other factors influence the barley buyer? He desires a barley free from admixtures with unsuitable types; he desires a barley free of disease and damage; and he desires a barley as free of seeds and other foreign material as possible.

I believe in general now we have covered the requirements of the malt-

An Illuminating Dissertation by One Who Has Specialized  
—Having Worked on Both Sides of the Argument.

**By C. GIBSON FRANKS, Secretary**  
*Chicago Chapter, Superintendents' Society*

ster from as complete an understanding as the terminal elevator man recognizes the problem.

At this point the personal element comes into the picture. Elevator operators have seen one barley buyer pass up a certain lot of barley and have it grabbed by another. This poses the question of why, if the barley were suitable for one maltster, it was not for another? The terminal elevator man at other times wonders why, if it is impractical to clean out the small, cracked or skinned kernels, the maltster is still willing or even glad to buy the lot of barley at a discount?

### Cream of the Crop

**S**INCE the maltster starts building up his barley stocks as soon as the crop is matured and sent to the market, he buys and fills up his elevator to as great an extent with country run barley as he can handle. Also, since

little or no contact with the terminal elevators.

Just where, then, does the terminal elevator come into the picture? Since the maltsters are purchasing and storing the best grades of malting barleys the terminal elevator stocks consist of the less desirable barleys which are sent to the markets and, later, the overflow or surplus of the better barleys that the maltster could not handle.

Complaints that come from the maltster about quality of malting barley must necessarily be limited to this barley which the terminal elevators are required to handle. Any other complaints must be directed to and corrected with an educational program for the barley grower. The terminal elevator by its very nature must pay its keep by the storage of grain owned by someone else, or through the cleaning and improving of grade of grains purchased for its own account, or lastly by an increase in market price over a period of storage.

### Cards Are on the Table

**W**HAT, then, are the complaints of the maltster as they affect the terminal elevator? In some cases it is claimed there is too much small berried barley in the lot. It has been said that the terminal elevators buy back and remix the maltsters screenings to such an extent that the individual kernels were recognizable. Yet, the barley the maltster buys is bought on sample and the small barley kernels do grow in the same fields. If the claim is to be credited, then the stock of small berries in the terminal elevators must be tremendous as it is bound to increase with each incoming car and crop. Since the elevator operator knows he must face discounts on the grain he sells to the maltster which in the maltster's opinion is inferior he is unlikely to do anything to lower his selling price. Likewise since no one is better equipped to clean and prepare the barley for malting than the maltster himself, would it be profitable for the

**H**ERE'S a good inside view of why the Elevator Operator gets provoked at the Maltster



and vice versa. Mr. Franks has been both and consequently been "aggravated" at both, but now in the light of his unique dual experience, the following article is one "whale" of an eye opener. Let's open up this subject, as he suggests, and "air" all the pros and cons—it'll help us all.

there is competitive buying between the various maltsters and since each individual maltster has considerable storage space, the best of the malting barleys are deposited in the maltsters hands soon after leaving the farm with



# PREFERRED!



SUPERINTENDENT WILLIAM H. GASSLER SAYS:

"As far as we can determine at this time, the workmanship and materials used on our Calumet Elevator last summer have proven quite satisfactory."

Caulking operations are shown in the center view; at the left the walls are being prepared for our elastic *Surfacite*—which is shown being applied in the view on the right.

## *Surfacite* *Waterproofing*

... Preferred because all disintegration and cracks are repaired with GUNITE, which is stronger than concrete, is hard, dense, waterproof with perfect bond to the old concrete.

... Preferred because then all surfaces are covered with the soft, elastic material—SURFACITE—many times the thickness of ordinary waterproofing.

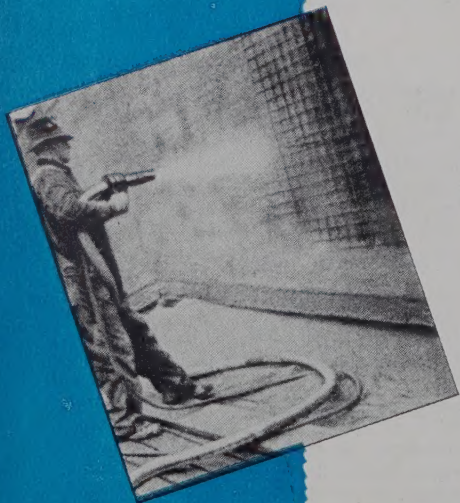
... Preferred because SURFACITE compensates for movement by a tough elastic hide and with a long-life flexible material bonded to the concrete.

You, too, will PREFER our services after we have gone over your problems, submitted facts, ideas and costs.

**JOHN D. BOLTON -- GUNITE CONTRACTOR**

20 NORTH WACKER DRIVE

CHICAGO, ILLINOIS





terminal elevator to install the specialized equipment necessary to provide this service which would only be a duplication of that already performed by the maltster who would probably not pay the additional premium for a service he could perform himself and control within his own limits?

As to germinating qualities and the quality of the malt derived from the various barleys, it must be recognized that the terminal elevator operator at all times keeps his grain in the best condition that the physical characteristics of the grains—as they come to him—and his handling permit. It is known that the maltster does not get consistent results at all times even from the same run of barley and also that various maltsters have varying success when using the same type of barley.

It seems to this writer that most of the maltster's problems can be met by his own efforts, mainly through education of the barley grower in the kind of seed to use, preparation of the soil and harvesting and threshing of the barley.

The terminal elevators, however, are eager and anxious to serve all of the processors and it is hoped that by more freedom of discussion and explanation of problems that they will be able to do so to a greater extent.

#### DOMINION GOVERNMENT CUTS WHEAT PURCHASES

**T**HE Canadian Government would guarantee to purchase only 230 million bushels of the 1941 crop at prices prevailing for the 1940 crop (approximately 50c). This is about 50% of what has been purchased in the last two years.

Bonuses of \$2 to \$4 per acre on acreage diverted from wheat will be paid to farmers in Prairie Provinces, provided the diversion follows government direction. The Wheat Board will also pay storage charges on undelivered 1941 wheat up to 230 million bushels.

#### ONE BREAD FOR RUMANIA

**R**UMANIA is contemplating making one bread only for national consumption. The "national" bread will be made from an admixture of wheat and maize flours.

#### PAOLO REVERE AND MUSSOLINSKI—WHAT'S IN A NAME!

**P**AUL REVERE, according to an Italian newspaper, was an English-hating Italian name Paolo Revere. Actually the dictionary of American biography asserts that he was born in U. S. of French ancestry.

#### WILL GERMANY DECLARE WAR ON U. S.?

**I**T'S sure that we won't declare war on Germany as much more help can be given Britain if we're out than if we're in, but suppose the Axis gets tired of this situation. What then?

#### MALT RESEARCH INSTITUTE REPORT

**T**HE Malt Research Institute has been conducting evaluative experiments with Oderbrucker and Wisconsin Barless barley. The results of this work are now available in a very interesting brochure from the Secretary, Box 2039, Madison, Wis.

Final plans for testing the malts were made in February and six breweries, four distilleries, and three food companies will complete these tests.

#### CORN GRIND

**C**ORN ground for domestic use by eleven refiners of starches, syrups, sugars, and other products of corn, totaled 6,486,805 bushels during February, according to Corn Industries Research Foundation.

#### CORN LOANS

**A** TOTAL of 79,326,079 bushels of corn valued at \$48,327,490.95 have been made on the 1940 crop. Approximately a million bushels a day have been moving into the loan during the first part of March.

#### WHEAT LOANS

**T**HE 1940 wheat loans totaled 278,052,884 bushels. Repayments have been made on these for 6,059,692 bushels for a value of \$3,676,140.08 as of March 11, 1941.

#### GRASSHOPPERS

**D**UE to the strong and successful campaign carried on last year, the U. S. Bureau of Entomology does not expect very widespread grasshopper infestation. However, North and South Dakota and western Minnesota may suffer considerable destruction if poison-bait applications are not used intensively. In scattered areas in the west this may be true also.

#### \$1.80 A YEAR AMPLE FOR GOOD DIET

**V**IRTUALLY complete foods, lacking only Vitamin C, have been developed by Massachusetts Institute of Technology scientists which will feed a person correctly for only \$1.80 a year. Tomato juice (two ounces a day) provides necessary Vitamin C. The food is eaten like cereal, but Dr. R. S. Harris, who had much to do with its development, believes that it will be used for medicinal purposes rather than to supplant normal diet.

#### GOOD WAY TO CLEAN OUT BINS

**S**OME elevators have moved government wheat out by getting permission from the producer to take up the producer's note plus interest and then selling the wheat on the open market.

#### RAIL MOVEMENTS OF GRAIN INCREASE

**D**URING the week ending March 15, 1941, 32,562 loadings of grain and grain products were recorded as over 31,577 for the same period in 1940 and 29,985 for 1939. The March 1st week had 34,058 loadings and the week ending March 8th, 31,113.

#### 1940-41 SUPPLIES HUGE

**T**HE current crop plus the carry-over from last year gave the United States a stock of over a billion bushels of wheat and more than three billion bushels of corn. This surplus is due in great part to the startling decline in United States exports.

During the 1939-40 crop year, Canadian exports were 31% greater than the previous year and Argentine exports 31% greater. United States shipments were 53% less than in 1938-39.

#### WARNING TO WHEAT BUYERS!

**S**OME carloads of wheat have been apprehended which had a decidedly kerosene odor. This grain came from farmers' bins and may have been treated with either kerosene or an inferior oil base fumigant, both of which render the grain unsuitable for milling. Observe carefully for odors on incoming grain!

#### HEART VS. HEAD

**E**VERY decent person's heart impels him to press for the surplus wheat to go to the relief of the European people who will suffer if they do not receive more food. On the other hand every sensible person's cool head tells him if the sufferings of European people should be relieved by this means that it would result inevitably and immediately in additional bombing of Great Britain—for the extra wheat would enable more workers to make more planes and more bombs for Mr. Hitler—and the additional bombing would cause not only suffering but immediate death to British men, women and children. And so the struggle between the heart and the head must continue until the great military drama unrolls itself to a conclusion.—Searle Grain Company, Limited, Winnipeg.

#### PORTUGAL CUSTOMER IN CANADA

**A**PPROXIMATELY 450,000 bushels of Manitoba wheat is reported to be booked by Portugal. The United Kingdom, also, arranged for the immediate movement of some lots of Canadian grain.

#### SOME FIGURING

"What are the best ten years of a woman's life?"  
"From 28 to 30."



## Kansas City Meeting

**T**HE Kansas City Chapter held its February meeting on the 27th at the Green Parrot Inn. Thirty-three members, guests and associates attended.

Speaker of the evening was Grover Meyer of Kansas City Power & Light Company, who gave a most interesting talk on static electricity.

A nominating committee will be appointed at the next meeting and new officers will be elected at the following meeting.

Kansas City has had an exceptionally fine year, an outstanding program and unusually well-qualified officers, but they are not content with mere excellence.

President of the Chapter, Claude Darbe, writes that the rest of the Society had best keep its eyes open during the coming weeks, for the KC's are planning a real . . . (secret). Furthermore, the Chapter intends to practically move Kansas City to Minneapolis for the June 9-11 Convention of the SOGES.

### HOPE HE'S RIGHT

**S**EEING "GRAIN" is one of the most exciting moments in my month—at least from the publishing aspect. I like its youth; I applaud its attractive format to the echo; and I predict a great future for it. My hat's off for your courage, determination, youthful ideas, and all the other traits that go to spell SUCCESS. If the grain-handling world is as pleasurably excited as I am, and it surely must be, you are in for the time of your life.—William E. McFee, American Rolling Mill Company, Middletown, Ohio.

### WASS YOU DER, CHARLIE?

**T**HAT's what Oscar Olsen said when we expressed the opinion that he couldn't have caught those speckled beauties, because Oscar's a real fisherman and real fishermen never catch any at all. They're out for the sport, you know,—until after several decades they catch one. Then fishing's an art.

Nevertheless our hero stoutly maintains that they're actual fish, not painted or mounted. Of course, that tree in the background doesn't seem exactly real and that grin on Oscar's face is a trifle sheepish. . . .

Think, brothers, think! What would you do if you announced



to the world that on your trip to Hot Springs National Park you were going to show old Isaac Walton a thing or two, and then discovered that the fish in Arkansas streams have become so wise that they haven't even married in the last 100 years.

Think again! What would you do?

Just to be a good sport we've told you our ideas, but keep it quiet and don't tell Oscar we even inferred as much—he's a little sensitive about such things.

## Convention Plans Under Way

**I**N JUST a couple of months (June 9-11) the Superintendent's Society will hold their big annual convention in Minneapolis. The Minneapolis Chapter is already working on a lineup of the program, speakers, educational exhibits, etc. Several reports have come in, too, that attendance will be unusually good this year, due to the growing number of problems with which the superintendents have to cope and which can only be solved by collective discussion.

## Supers Take Up Bowling

**C**HALLENGES are being flung with abandon to any and all comers by Archer-Daniels-Midland and the Glidden Company, both of Chicago, for some competition at the fine old sport of bowling. Other plants have already held matches, but a definite league has never been established—that is, not as yet.

## Quiet Season in Collingwood

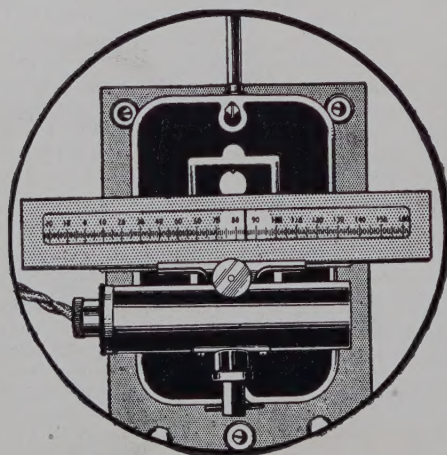
**M**R. NORMAN D. BOADWAY of Collingwood Terminals, Ltd., recently made a trip to Chicago. Norman reports a quiet winter with his house full of grain, but not very much movement. Six storage boats are waiting to be unloaded, but so far room has only been made to accommodate two of them.



### JAMES RICHARDSON ARRIVES

**J**AMES INGRAM RICHARDSON arrived for an extended visit in the Chicago area. Named after his late Uncle well known in the flour milling industry for his activities with Spillers, Ltd., of Calgary, et al., young "Jim" looks forward to years of pleasant association with the grain handling and grain processing interests. His grandfather is the widely admired "Uncle" Henry Richardson of Richardson Scale Company of Clifton, N. J., whose son, Ingram, represents the firm in the Chicago area. "Jimmy" tipped the scales at 7 pounds 4 ounces at birth on January 29th. His application for membership in the Supers' Society is now before the Directors.

# 12,987 Grain Tanks can't go wrong



You too can protect your grain by installing a

## ZELENY THERMOMETER SYSTEM

Write today for the cost of equipping your bins.

## ZELENY THERMOMETER CO.

9 South Clinton Street, Chicago, Illinois



## New Venting, Suction Code Up

REPORTS KENT H. PARKER  
Western Actuarial Bureau, Chicago

IN the December issue of "GRAIN," attention was called to the work of the special sub-committee of the Dust Explosion Hazards Committee of the National Fire Protection Association, which has been engaged for some time in the development of a suitable code covering the application of suction and venting for the control of dust in grain elevators and storage units.

A tentative code had been prepared last fall and had been studied by the Terminal Grain Weighmasters' Association. After discussion at the December meeting of the Dust Explosion Hazards Committee, the sub-committee in charge of this code met and prepared a revised draft incorporating the various changes that were felt advisable. This revised draft was then submitted to the co-operating committee of the Weighmasters for final consideration.

Mr. Joseph A. Schmitz, Chief Weighmaster, Board of Trade, who as Chairman of the Weighmasters' Committee has given a great deal of his time to the work on this code, has just recently announced that the revised draft has met with the approval of that Committee. The code now goes up for approval of the parent Dust Explosion Hazards Committee for presentation and tentative adoption at the May convention of the NFPA. It is expected that a draft of the tentative code if approved will be made available shortly so that grain men will have the opportunity to study its provisions and offer such suggestions as may be of value. (Members of the Supers' Society now have copies for their perusal and comment. Others may obtain copies from "GRAIN.")

### Hit or Miss Installations Futile

IT seems pertinent at this time to touch upon certain of the fundamentals embodied in this code. It is intended to point the way to a more general use of adequate dust control measures, particularly in elevators of the terminal, sub-terminal, and processing class. To accomplish such an objective, attention must be focused by the trade on the use of effective and acceptable forms of suction or venting for every principal point where dust clouds tend to be discharged into the house. It is of little or minor value to equip some few parts of a house and leave the balance without adequate dust control. Certain of the criticism on the part of weighing departments in the past has been due to the hit or miss type of installation. To provide reasonable control of floating dust, installation should be as complete as possible. If there is an honest endeavor to keep down dust clouds at all points, there will be no objection to the proper use of suction and venting.

# LUFTWAFFE

The day is nice enough—pleasant, just a little cloudy. Of a sudden the high-pitched scream of tortured struts warns one that underground is the place to be when the luftwaffe comes. But it's too late. Boom! Boom! Boom! go the bombs and the Molotov bread baskets set fires roaring in a hundred places at once. Its just too bad, but nothing can be done.

But what about the luftwaffe against our great elevators—storehouses of the nation's and the world's food? Only care and work and PROTECTION can insure against the swift onslaughts of Demon Dust and Fury Fire—and the H. H. Robertson Company can provide that protection properly.

ROBERTSON SAFETY VENTILATORS remove fine explosive dust by a continuous gravity action, and, in case of a blast, minimize destruction and the danger of a second explosion by continuously venting gases, flames, and pressure.

ROBERTSON CAPACITY BIN VENTILATORS are guaranteed not to offer more than .0026 water gauge resistance and not less than 324% free area vs. stack area. They prevent the stirring up of dust when the bin is being filled or emptied by providing BALANCED ventilation.

ROBERTSON PROTECTED METAL is "service-proven" roofing and siding. It has structural strength in its steel core. It is weather-proof and corrosion-proof by virtue of its three factory-applied protective coatings.

*Write Today for Details*

## H.H. ROBERTSON CO.

Farmers Bank Bldg.

Pittsburgh, Pa.



Certain safeguards, of course, will be required where supervised weights are in effect. Among these are the control of air velocities at suction connections, and the use of inspection traps or separate collectors discharging back into the grain stream. These requirements as embodied in this code are reasonable, however, and have been followed in quite a few installations that have been made in the past.

With the interest today in the protection of property from the standpoint of national defense, it seems very appropriate that attention is focused on this concrete effort to reduce dust explosion losses in grain elevator properties.

#### VERSUS THE SEAWAY PROJECT

**T**HE State of New York has officially protested against the proposed St. Lawrence-Lakes-to-the-Sea project and the Association of American Railroads has also taken action to have the measure discredited.

Mr. Fletcher, General Counsel of the Association, said the project would hinder defense and would have serious economic repercussions. Organizations Mr. Fletcher mentioned as being with his Association in their opposition were: "Coal interests, both labor and capital, with the maritime interests on the Atlantic, the Gulf of Mexico, the Great Lakes and the inland waterways, the Mississippi Valley Association, the commercial organizations in the Atlantic states, a vast majority of the commercial clubs of the Great Lakes cities and the inland cities located in states bordering on the Great Lakes and other important bodies of thoughtful and patriotic citizens."

#### The Danger of Mites

**I**N THE United States large quantities of corn and of wheat are stored in cribs and bins on farms. There is considerable fear that some, or indeed much of this may go out of condition through heating, or may be damaged by weevils, which are plentiful in grain in the United States.

In Western Canada there is a fair amount of grain still being stored on the farms in bins. This grain, too, is subject to the same damage as in the United States. Grain can go out of condition here through heating, the same as it can elsewhere. It is true, we are not much bothered with grain weevils in Western Canada, but we do have mites, which have been found to be quite plentiful in stored grain this year. Farmers, therefore, should watch their bins carefully.

Grain will keep much better if the bins can be ventilated so that the heated air can escape. The first indication of serious damage from mites or from heating will be in the odor of the grain. It may smell musty from heating, or if the odor reminds one of sweet honey, then it is from mite damage.

Mites will not increase seriously and so damage much grain until the weather heats up in the spring, unless of course, the grain is heating, which can occur at any time. Then mites may begin to multiply at an enormous rate if quantities of them are present. If turning cannot be done, then the top layer of grain, if it should be somewhat "crusted" as often is the case, should be removed and hauled to market.

In any event, an examination of

stored grain should be made for mites from time to time. The mites can be seen with a fairly strong magnifying glass if they are active. Elevator Agents themselves are quite skilled in detecting mites and could no doubt assist farmers in determining how badly the grain is infested, although it must be remembered that grain which has only a slight infestation of mites today may, if the grain starts to heat, become seriously damaged in a few days. The important thing, however, is that bins on the farms should not merely be filled and then forgotten. They should be carefully examined from time to time. —Searle Grain Company, Ltd., Winnipeg.

#### TEMPORARY STORAGE AT THE LAKEHEAD

A 50,000,000 bushel temporary storage project is being rushed to completion by Canadian grain men. This will be necessary to take care of the overflow of present facilities and will cost approximately \$4,000,000.

#### MORE DECENTRALIZATION ADVOCATED

**A**DVOCATING the spread of industrial plants to rural area, Chester C. Davis, National Defense Advisory Commissioner in charge of agriculture, believes that about five million marginal farmers will eventually come into industry anyway and believes decentralization to their areas would help more than waiting for migration.

#### RECORD CROP INSURANCE

**A**TOTAL of 420,077 crop insurance contracts were written for 1941 by the Federal Crop Insurance Corporation. These contracts guarantee a total production of 110,591,202 bushels of wheat from 10,946,284 insured acres. Payments to the FCIC were 14,358,958 bushels of wheat (or cash equivalents) for this insurance.

#### GOOD SIGN FOR POST WAR YEARS

**T**HE *London Times* recently urged abandonment, not only by the Continent, but by Great Britain as well, of the trend toward economic self-sufficiency. Primary argument used by the *Times* was that Britain's prosperity and power depend on the good health of her foreign trade and shipping industry.

#### OVIE CHRISTOPHERSON AT SOO TERMINAL

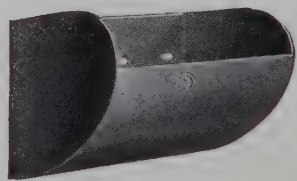
**M**R. OVIE N. CHRISTOPHERSON, former superintendent of the old A-D-M Delmar No. 1 elevator that burned a few years ago is now running the Soo Terminal as a barley house for Archer-Daniels-Midland Company.

## CALUMET CUP

MOST EFFICIENT AND FASTEST ELEVATING CUP IN THE MARKET.

RECOMMENDED FOR  
GRAIN ELEVATORS — FEED  
PLANTS — SOYA BEAN  
PLANTS — MALT HOUSES —  
BREWERIES — SEED PLANTS.

FLOUR MILLS AND FEED MILLS — USE  
OUR VENTED BUCKETS FOR HANDLING  
FLOUR AND SOFT FEEDS.



U. S. Pat. 1944932



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SOLE OWNERS of the patent and  
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Minneapolis, Minn.  
Northwest Distributors



## Korea, Scotland and Points Between Represented at Chicago Meeting

**W**HEN the sixty-three members and guests of the Chicago Chapter of the Superintendents' Society gathered at Rosenbaum Brothers' Calumet Elevator in South Chicago, you may be sure the discussion, figuring and examining of the elevator's innovations, was not old-fashioned. The automatic car dumper, the magnetic separators which remove 140 pounds of ferrous material a day, the synchronous motors, the dust collecting system, enclosed central station, and a dozen other ultra-plus features came under the collective eyes of a bunch of sharp-witted, unbeguileable Superintendents and tradesmen and met with their 100% approval.

After the tour proper was over, light refreshments were served in the fine two-story brick office building's modern employee's locker room and the munching Supers talked of problems which they could solve with some of the equipment they had seen that day. Yes, Superintendent of the Calumet William Gassler was verbally crowned "king of convenience," but don't think there was anyone there who didn't feel just the slightest tinge of envy.

Mr. William H. MacDonald, Rosenbaum Brothers, Manager of Elevators, expressed his firm's pleasure in being host for the inspection tour, following a sumptuous "fish fry" at the famous Lundgren's Inn. He described the rapidity with which the new plant was planned, designed and erected and how pleased they were with it.

"The danger of sabotage is going to close plants to such enlightening trips as you've had," Mr. MacDonald said in encouraging this Superintendents' Chapter to cram in as many tours as possible before the ban is clamped down.

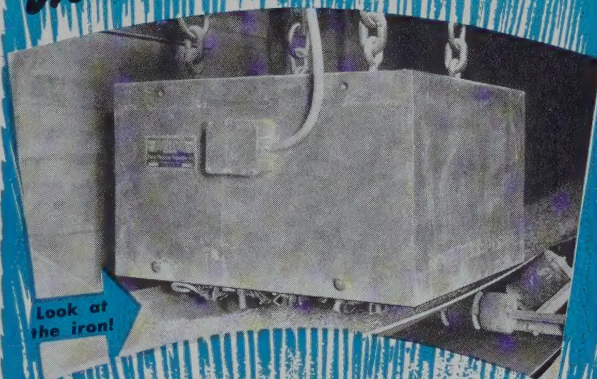
Mr. Arthur Lindley, Clement Curtis & Co., Chicago, widely known grain marketing authority, was the speaker of the evening. In addition to the many factors contributing to our present market glut, Mr. Lindley dwelt pertinently on needed freedom, individualism, and "hands off" by the government.

**M**R. LOU GILLAN, Superintendent, Corn Products Refining Company, Argo, spoke of the growth of corn refining to a point where that one plant grinds out 87,000 bushels of corn daily. He told something of their problems and solutions, commended the Chapter on its initiative, and asked to be included on the next plant tour—expressing his thoughts on the educational value of keeping up-to-date.

Mr. Lincoln W. Scott, Manager of Corn Products' Heijo (Korea) plant for nine years, described their operations with the grinding of 7,000 bushels of native, Argentine, South African and other corn, of buying a million bushels one time and storing it in sacks under a corrugated roof—and how hard and black it got in a hurry.

Mr. Fred Morton, Manager of Corn Products' Paisley, Scotland, plant, touched on the war and

*How many* **EXPLOSIONS**  
*in 25 lbs of IRON?*



**That's what this Dings Magnet Removes Daily at the CALUMET ELEVATOR!**

**U**NBELIEVABLE, isn't it? 25 pounds of iron "dynamite" removed daily from the conveyor belt under the car dump at the Calumet Elevator, Chicago, Illinois. Nuts, bolts, railroad spikes, broken pieces of machinery, tools—every conceivable kind of miscellaneous iron!

How much spark-causing, death-dealing iron is going through your plant? Do you know? It could easily be as much as at Calumet—they didn't believe it possible until they saw it with their own eyes after installing two Dings High Intensity Rectangular Magnets—one over the belt in the car dump, one over the belt in the truck dump.

The installation of electro-magnets at Calumet is the first of its kind known in Terminal Elevators. It's been an eye-opener! Nobody ever imagined there would be so much iron—and before Dings developed the tremendously powerful Rectangular Suspension Magnet, there was no practical way to remove it. Now, this magnet pulls any size chunks of iron right up off a belt traveling 800 ft. per minute! It's one of the greatest fire and explosion prevention devices ever developed for elevators! It will pay you well to investigate it. Write for literature and complete details *today*—you'll feel safer when you know your elevator is protected against the menace of iron!

*Write for Literature Today*

**DINGS MAGNETIC SEPARATOR CO.**

**Dings**  
MAGNETIC SEPARATION **HIGH INTENSITY**

705 SMITH ST., MILWAUKEE, WIS.

*The World's Largest Exclusive Builder of Electro-Magnetic Equipment. Established 1899*



the sense of humor of the British peoples. He told of one roadside stand operator whose place was bombed one night. Bright and early the next morning he put up a sign reading: Hitler was my last customer. Will you be my next?

Mr. William H. Gassler, widely known Superintendent of the Calumet Elevator, described some of the unique innovations incorporated in this new plant, and told of their experiences in starting up the house and getting used to operating it.

Mr. Arthur B. Osgood, The Day Company, Minneapolis, spoke on dust explosions and their prevention. "Dust, oxygen, and ignition are the three necessary factors," he explained, in describing the elastic limits for a blow-up, and reciting some of the scientific work that has been undertaken. "Eliminating the dust percentage in the atmosphere to a point where an explosion would be minimized—should it occur—is," he pointed out, "the greatest possible protection to lives, businesses and properties in light of what we know today."

Mr. Robert Manegold, Dings, Magnetic Separator Company, Milwaukee, discoursed interestingly on the discovery (in 1792), development, and application of such units as are installed in the Calumet Elevator over the belt from the car dumper to the workhouse boot, as well as over the truck-dump belt. He enlightened his intent listeners on types of separators and what they are best suited for. "Some 140 pounds of metal a day—21 tons a year—are removed with these two magnetic separators," he quoted on the authority of Mr. Frank Butt of John Metcalf Company, the designers and contractors. No less a person than Thomas Edison developed the magnetic pulley, Mr. Manegold told.

Mr. Grover C. Meyer, Kansas City (Mo.) Power & Light Company, intended to speak on static, but having left his glasses at home confined his remarks to the activities of the Kansas City Chapter of the Superintendents' Society.

Mr. Earl R. Evans, Evans Elevator Company, Champaign, Ill., expressed the sentiments of all the other visitors from Terre Haute, St. Louis, Lacon, etc., in feeling privileged to see such a fine plant.

After adjournment the crowd sat around for over an hour and a half asking the speakers questions, and obtaining their counsel.

Next month the Chapter hopes to go through the Swift & Company plant at Champaign, Ill.

#### IF EVERYONE IN THE COUNTRY GAVE ME A PENNY!

ONE editor, by name of Joe Dale, of the Lawrence County (Miss.) "News," published a front page request for payment of subscriptions. Are we tempted?

#### DECISION MAY NULLIFY ACT

A DECISION by a Texas District Court has recently been given which makes legal the contracting with employes in the following manner to avoid time and one-half for overtime: Work is agreed upon at a basic hourly rate (equal to the legal minimum under Wage-Hour Law), time and one-half is to be figured for overtime from this basic rate, each employe receives a bonus of an amount equaling the difference between his present earnings and former earnings. The total amounted to a fixed weekly wage, guaranteed, with the understanding that overtime need not be paid at one and one-half times a rate based upon the regular weekly wage. This decision (upholding the contract) may be reversed in higher courts, however, so it cannot be relied upon as yet.



"A good mixer is always in demand at a party—and, an absolute necessity on the mixing floor".

#### NLRB Restricted by Court

THE Supreme Court has ruled against the National Labor Relations Board's method of controlling future actions of employers (when once they have violated the Wagner Act) by obtaining injunctions against any future violation of the law and making the employer liable to be penalized for violation of the whole law upon infraction of only a minor point.

DEDUCTIONS for income tax purposes can be made for damage to your car, provided accident was not "willfully negligent."

PAY given to employes on holidays may be counted as overtime.

IT IS permissible under the Wagner Act for an employer to state the terms of a collective bargaining agreement on which he will not yield.

YOU can demand a hearing of an unfair practice case involving you or your firm, at a place convenient for you.

IF you have a contract with a union, you can prevent another union from picketing your plant.

#### NEW SUPER AT NEW ORLEANS

MR. V. E. Cerise is successor to Mr. John B. Sanford as superintendent of the Public Grain Elevator in New Orleans.

#### SANFORD FOR SELF

JOHN B. SANFORD, widely known Superintendent of the Public Grain Elevator at New Orleans, has engaged in business for his own account. Mr. Sanford has had wide experience during his two decades at the elevator in handling grain for export.

#### Seed Trade Reporting Bureau Announcement

SEED Trade Reporting Bureau, Inc., 223 W. Jackson Blvd., Chicago, have purchased the grain and seed testing equipment business of Harry B. Olson and will continue the consolidated business under their own name—Seed Trade Reporting Bureau, Inc., at the same address. These businesses were formerly directly competitive, and the combination will permit more efficient operation and assure prompt delivery on high quality merchandise.

LeRoy M. Smith founded Seed Trade Reporting Bureau in 1912 for the manufacture and distribution of testing equipment for the grain and seed industry. Mr. Smith was formerly with the United States Department of Agriculture in Washington, and was fully familiar with Government standards and requirements for accurate methods of grading grain. He helped design many of the devices still in use.

When Seed Trade Reporting Bureau first began business, Mr. Smith had to pioneer the field by introducing the Brown-Duvel Moisture Tester, Boerner Sampler, sieves and probes to the grain trade. Harry B. Olson was formerly with Seed Trade Reporting Bureau and the consolidation will again unite his friends to the older firm.

Seed Trade Reporting Bureau plans to adhere strictly to the latest Government standards on all testing devices. C. S. Phillips continues as General Manager, assisted by P. W. Burrows.

#### OURS ALL NIGHTMARES

JUST a belated word of praise for "GRAIN" and to say I hope you have more success than you ever dreamed of.—Harry Shere, Van Dusen Harrington Company, Minneapolis.

#### WHY YOU WORK

Because—It is your patriotic duty to have an income, for the government needs to tax it.



## Be Careful! Recently . . .

**A**N exploding steam boiler killed a stenographer in the plant office; A negro worker had his leg ground off by an unguarded screw conveyor;

Eye hemorrhage was caused by undue exertion lifting sacks of feed;

Dust causing a revival of latent tuberculosis made an employer liable for heavy sickness benefits to an employee;

Shifting a belt off a pulley caused injury to Minnesota worker, and

A customer caught his foot between grating and scale platform.

(All of these cases are actual and in all of them the employer or owner of the elevator was liable for damages.)

**F**ALLING into the pit, a Texan came through with only an injured hip and back. That's all.

**H**IS left arm was all that was broken when a Pacific Coast employee fell from the scaffolding during construction work.

**A**N EXPLOSION in a southwestern boiler room resulted in surprisingly few burns, but those were painful enough.

**H**IS clothing caught in the shaft of an old water powered mill, an easterner was killed outright.

**A** PULLEY flew off a piece of equipment in Missouri, crushing in the forehead of the operator nearby.

**F**ALLING into a tank of meal a Nebraska foreman was suffocated.

**A**N UNEXPECTED slack in a rope slipped on a bolt to which it was tied, caught the workman's foot and his weight pulled the scaffolding and all over on top of him. He never knew what hit him, poor fellow.

**R**IGGING broke as scooper climbed from steamer, struck him on the head fatally knocking him back into the empty hold.

**B**ELT flew off a northwest machine, knocking employee down and continuing to lash him.

**A** 110-pound wench fell over 100 feet to the ground killing one Washington employee and badly injuring two.

**T**HROWING waste oil into a furnace at the company's garage caused deep burns about the face and arms of a Wisconsin man. He thought there was no fire therein.

**A** HEAVY hoist beam fell and hit an Ohioan on the head; pinned him under.

### VISITORS IN CHICAGO

Oscar Olsen, Peavey Terminal Elevator, Duluth, visited in Chicago between planes on the 13th of March. Paul Christensen, Van Dusen-Harrington Company, Minneapolis, got around quite a bit in the time he was here, the 10th and 11th of the month. Oscar is vacationing at Hot Springs National Park, Arkansas at the present time. There's no place like home though! (That's a lie.)

## NEW SLANTS ON THE LABOR LAWS SITUATION

**A** COMPANY selling entirely within its own state was brought under the jurisdiction of the Wagner Act because 18% of its manufacturing materials came from other states. The Labor Board evidently wants to extend its power of legal compulsion to companies not hitherto regarded as being engaged in interstate commerce, but which are, if lines are drawn fine enough, actually so engaged.

Companies themselves have yielded considerably of late in that they are no longer disputing the right of collective bargaining, but rather are working on the strategy of that same bargaining.

No strike clauses and cooling off clauses will have important bearing in future contracts and increases—even decreases—in wages, may be regulated by clauses providing for same with the flux of the cost of living and the variation of competitors wage scales along with increases in wage as employer earnings increase.

### Determination Plus

**"A**LL our horizons, except that which looks toward your country, are dark and filled with forebodings and uncertainties. We sternly realize that the important thing underlying all our activities is a grim determination to fare forth on the road we ourselves have chosen to travel. As we turn all our strength to the task, our nerves are steeled and our hope inspired, by the support we are getting from the lovers of democracy in your land." From Mr. R. B. Pow, Reliance Grain Company, Ltd., Port Arthur, Ontario.



### LONE WOLVES STARVE!

**T**HESE are trying times for the "lone wolf." The turn of events in Europe, the complications of political and economic life which are ever growing in our own country, and the delicate balance of commerce make of life a very profound and serious problem. More than ever before in his history man is the "social animal." Safety, progress, and happiness all depend on man's association with man. Let us not forget this essential idea when we tend to speak lightly of the work being done by our trade association. On the other hand, let us consider the privilege that is ours to freely participate in serious convention discussions, and not let the opportunity escape us because of disinterest.

## Canadian Funds at Full Value at Convention Hotel

**O**NE of the Minneapolis Hotels, we hear, has announced that it will accept Canadian funds at full value from members of the Society of Grain Elevator Superintendents during their June 9-11 Convention. Preparations at an early date are desirable, as some delay may be experienced by Canadian members who wait until the last moment before making their plans to attend.

### SAFETY CONTEST WINDS UP

**T**HE three year Safety Contest sponsored by the Society of Grain Elevator Superintendents is to all intents and purposes over with. (The dead-line for entries is May 1st. All members are eligible.) Over with that is except for the awarding of the cups to the winners and, of course, finding out who the winners are. As you know, there are three cups to be awarded and the little as well as the big companies have a chance because of the classified division of the contestants. Come up to Minneapolis for the Society of Grain Elevator Superintendents' Convention, June 9-11, and get an award yourself or have fun competing with the winner!

### MORE RULES FOR GOLF!

**R**ULES on British golf courses now include the following:

1. Red flags mark the position of delayed action bombs.
2. Balls can be replaced as near where they originally lay as possible when taken out of play by enemy action.
3. Taking cover without penalty when bombs are falling is allowed.

### GLYCERINE MIXTURE THAT REMOVES RUST FROM CONCRETE

**D**ISSOLVE 1 part of sodium citrate in 6 parts of water and mix thoroughly with an equal volume of glycerine. Mix a portion of this solution with powdered whiting to form a paste that is just stiff enough to be spread on the rust stain in a thick coat by means of a putty knife or trowel. This will dry in a few days. After this, it should be replaced with a new layer of the paste, or the first layer softened by adding more of the glycerine-containing liquid. Several applications may be required, but the results usually warrant the effort. Quicker results may be gotten by using ammonium citrate, but this substitution may be injurious to polished surfaces.

### ENTHUSIASM AND ALERTNESS

**"G**RAIN" should have a real place because of its note of enthusiasm and alertness.—Bennett Chapple, Vice President, American Rolling Mill Company, Middletown, Ohio.



# For Elevating GRAIN and GRANULAR MATERIALS THERE IS NOTHING MORE EFFICIENT...

*Here's what they will do for you*

- 1 Scoop in the grain with "cushioned action."
- 2 Carry Maximum Loads.
- 3 Permit close spacing, avoiding pick-up impacts.
- 4 Do less damage to grain.
- 5 Reduce wear on equipment due to smooth-flowing pulsations.
- 6 Discharge load smoothly because of unique design — backlegging eliminated.
- 7 Will not discharge prematurely over head pulley.
- 8 Confine load within bucket without spillage.
- 9 Eliminate spraying action in the head.
- 10 Permit wide range of belt speeds without affecting efficiency.
- 11 Increase capacity from 10% to 50% to even 100% guaranteed.

Take advantage of this economical way of "stepping-up" your bucket elevator capacity. "NU-HY" Buckets can be installed in your present elevator without any belt or casing alterations. By merely replacing your old buckets, a notable increase in capacity will result, and further increases can be obtained by spacing buckets according to our studied recommendations.

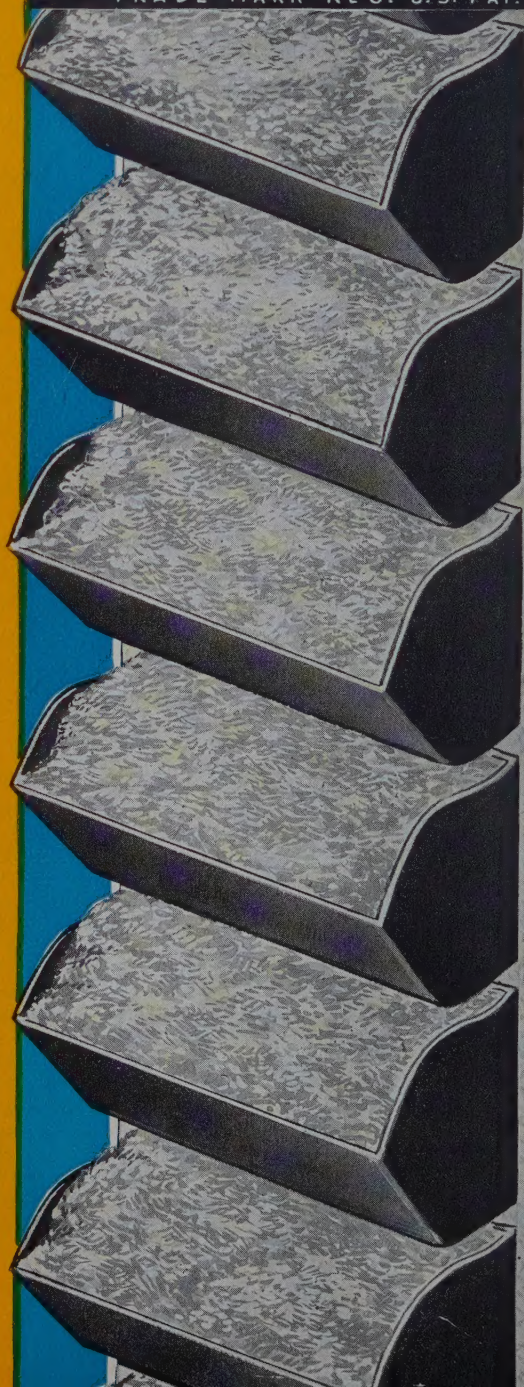
Guaranteed recommendations to give you desired capacity, made upon request.

The "NU-HY" Bucket will outperform any other elevator bucket when elevating granular products. It is equally efficient in pickup and discharge when operated at any practical spacing or belt speeds.

HEAD PULLEY DIAMETERS	24" and Smaller	30" to 36"	36" to 42"	42" to 48"	48" to 54"	54" to 60"	60" to 72"
FPM Belt Speed Range	250-446	353-546	386-604	429-654	465-693	516-828	
Guaranteed Bushels Per Hr. Capacities at Belt Speeds of	300 FPM	350 FPM	400 FPM	450 FPM	500 FPM	600 FPM	
Bucket Size	Popular Spacing	9'7"	11'3"				
6 x 4"	6"	1533	1788				
7 x 5"	7"	1752	2044	2336	2628	2920	
8 x 5"	7"	1974	2303	2632	2961	3290	
9 x 5"	7"	2193	2558	2924	3289	3655	
10 x 5"	7"		3696	4224	4752	5280	6336
11 x 6"	8"		4032	4608	5184	5760	6912
12 x 6"	8"			5440	6120	6800	8160
12 x 7"	9"						

The above table does not attempt to show bushel capacity of all sizes at closest permissible spacing of buckets and highest belt speeds. We will gladly furnish upon request more detailed information on spacing, belt speed and capacity, to enable you to obtain maximum efficiency in your elevator and our recommendations will be fully guaranteed.

than  
**THE Nu-Hy**  
GRAIN BUCKET  
TRADE MARK REG. U.S. PAT. OFF.



## SPECIALISTS

We are specialists in the design and fabrication of Screw Conveying and Bucket Elevator Systems and have many new developments to offer. We also operate a large sheetmetal department for the production of elevator casings, screw conveyor boxes, spoutings, hoppers, etc.

**Screw Conveyor Corporation**

707 HOFFMAN ST.

HAMMOND, IND.

SCREW CONVEYORS



ELEVATOR BUCKETS

TRADE MARK REG.

U.S. PAT. OFFICE

PAT. PENDING